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EXAMINER	
CASCA, FRED A	

ART UNIT	PAPER NUMBER
2687	

DATE MAILED: 07/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/668,299	LEHTINEN ET AL.	
	Examiner	Art Unit	
	Fred A. Casca	2687	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-27 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-27 is/are rejected.

7)☒ Claim(s) 2-4 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on September 24, 2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 2 is objected to because the word "parameter" in line 2 of claim 2 needs to be replaced by "procedure".

2. Claim 3 is objected to because the word "parameter" in line 2 of claim 3 needs to be replaced by "procedure".

3. Claim 4 is objected to because the word "parameter" in line 2 of claim 4 needs to be replaced by "procedure".

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-3, 6-7, 9, 14, 17, 18, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2002/0082012 A1, Wang et al. in view of U.S. Pub. No. 2003/0157934 A1, Liang

Referring to claim 1, Wang discloses a method of selecting a handover in a cellular network (Abstract, and paragraph 0001, "facilitate selection of handoff"), said method comprising the steps of setting said handover procedure (paragraphs 0017-0019, "a hysteresis threshold", note that setting a handover procedure involves setting a hysteresis threshold).

Wang does not disclose a method of selecting a handover in a cellular network, said method comprising the steps of **Measuring a delay of a handover procedure**, and setting said handover procedure **based on the result of said measurement step**.

Liang discloses a method for bandwidth utilization and signal strength-based handover initiations in a wireless system. Liang further teaches that measuring handover delay is used in making handover initiation algorithms (Abstract and paragraphs 0006-0007, "a wide range of service characteristics related to handover, such as . . . handover delay", note that handover delay is considered and inherently measured).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the method of Wang by providing **measuring a delay of a handover procedure, as suggested by Liang,** and allowing setting said handover procedure **based on the result of said measurement step,** motivation being to provide a more efficient handover procedure by using handover delays.

Referring to claim 2, the combination of Wang/Liang disclose the method according to claim 1, and further disclose the measuring step comprises measuring the delay of the handover procedure (Liang, paragraphs 0006-0007) and, further disclose the handover parameter comprises a hysteresis value for a handover threshold (Liang, paragraphs 0006-0007).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Wang/Liang by providing the measuring step to comprise measuring the delay of the handover procedure and disclose the handover parameter to comprise a hysteresis value for a handover threshold, as suggested by Liang,

motivation being to provide a more efficient handover procedure by using handover delays.

Referring to claim 3, the combination of Wang/Liang disclose the method of claim 1, and further disclose the measuring step comprises measuring the delay of the handover procedure (Liang, paragraphs 0006-0007), and further disclose the handover parameter comprises a length of an averaging window used for measuring transmission quality of a radio connection (Liang, paragraph 0045, "averaging window").

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Wang/Liang by providing an averaging window used for measuring transmission quality of a radio connection, in order to allow a more efficient measuring system.

Referring to claim 6, the combination of Wang/Liang disclose the method of claim 1, and further disclose the setting step comprises setting the handover parameter (Wang, Abstract, and paragraphs 0017-0019, "a hysteresis threshold", note that setting a handover procedure involves setting a hysteresis threshold) and further disclose the handover parameter is tuned dynamically based on the result of the measuring step (Wang, Abstract and paragraphs 0006-0007, "a wide range of service characteristics related to handover, such as . . . handover delay", note that handover delay is considered and inherently measured).

Referring to claim 7, the combination of Wang/Liang disclose the method of claim 1, and further disclose comprising the step of comparing the result of the measuring step with a predetermined threshold (paragraphs 0001, 0011, and 0017-0020, "By dynamically altering the value of the handoff threshold responsive to", "threshold formed of a set of values is dynamically selected", note that a predetermined threshold is established and inherently the result of measuring step is compared with the predetermined threshold).

Referring to claim 9, the combination of Wang/Liang disclose the method of claim 1, and inherently disclose the setting step to further comprise the steps of setting the handover parameter to a first value when the measured handover delay is smaller than the predetermined threshold, and setting the handover parameter to a second value when the measured handover delay is not smaller than the predetermined threshold (Wang, paragraphs 0017-0020, "threshold is adaptively selected", note that a threshold value is used, inherently a handover value would be either below the threshold or above the threshold, and the threshold value is inherently used to adjust the value of the handover parameter, hence the step further comprise the steps of setting the handover parameter to a first value when the measured handover delay is smaller than the predetermined threshold, and setting the handover parameter to a second value when the measured handover delay is not smaller than the predetermined threshold).

Referring to claim 14, Wang discloses a network device for selecting a handover parameter in a cellular network (Abstract, paragraph 0001, and FIGS 1-3, "apparatus 42", "facilitate selection of handoff"), said device comprising setting means for setting said handover parameter (paragraphs 0017-0019, "a hysteresis threshold", note that setting a handover procedure involves setting a hysteresis threshold, hence a setting means exits for setting handover parameters).

Wang does not disclose a network device for selecting a handover parameter in a cellular network, said device comprising **measuring means for measuring a delay of a handover procedure,** and setting means for setting said handover parameter **in response to said measuring means.**

Liang discloses a method for bandwidth utilization and signal strength-based handover initiations in a wireless system. Liang further teaches that measuring handover delay is used in making handover initiation algorithms (Abstract and paragraphs 0006-0007, "a wide range of service characteristics related to handover, such as . . . handover delay", note that handover delay is considered, hence a measuring means exits for measuring a delay of a handover procedure).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the method of Wang by providing **measuring means for measuring a delay of a handover procedure, as suggested by Liang,** and allowing setting the handover procedure **based on the result of said measurement step,** motivation being to provide a more efficient handover procedure by using handover delays.

Referring to claim 17, the combination of Wang/Liang disclose the device according to claim 14, and further disclose the handover parameter is a hysteresis value for a handover threshold (Liang, paragraphs 0006-0007).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Wang/Liang by providing the measuring step to comprise measuring the delay of the handover procedure and disclose the handover parameter to comprise a hysteresis value for a handover threshold, as suggested by Liang, motivation being to provide a more efficient handover procedure by using handover delays.

Referring to claim 18, the combination of Wang/Liang disclose the device according to claim 14, and further disclose the measuring step comprises measuring the delay of the handover procedure (Liang, paragraphs 0006-0007), and further disclose the handover parameter comprises a length of an averaging window used for measuring transmission quality of a radio connection (Liang, paragraph 0045, "averaging window").

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Wang/Liang by providing an averaging window used for measuring transmission quality of a radio connection, in order to allow a more efficient measuring system.

Referring to claim 26, Wang discloses a network device for selecting a handover parameter in a cellular network (Abstract, paragraph 0001, and FIGS 1-3, "apparatus 42",

"facilitate selection of handoff"), said device comprising a setting unit for setting said handover parameter (paragraphs 0017-0019, "a hysteresis threshold", note that setting a handover procedure involves setting a hysteresis threshold, hence a setting unit exits for setting handover parameter).

Wang does not disclose a network device for selecting a handover parameter in a cellular network, said device comprising a **measuring unit for measuring a delay of a handover procedure,** and a setting unit for setting said handover parameter **in response to said measuring means.**

Liang discloses a method for bandwidth utilization and signal strength-based handover initiations in a wireless system. Liang further teaches that measuring handover delay is used in making handover initiation algorithms (Abstract and paragraphs 0006-0007, "a wide range of service characteristics related to handover, such as . . . handover delay", note that handover delay is considered, hence a measuring unit exits for measuring a delay of a handover procedure).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the method of Wang by providing a **measuring unit for measuring a delay of a handover procedure, as suggested by Liang,** and allowing setting the handover procedure **based on the result of the measurement unit,** motivation being to provide a more efficient handover procedure by using handover delays.

Referring to claim 27, the combination of Wang/Liang disclose the device according to claim 26, and further disclose he selection unit comprises a hysteresis selection unit (Wang, paragraph 0018-0020, "a hysteresis threshold").

6. Claims 4, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2002/0082012 A1, Wang et al. in view of U.S. Pub. No. 2003/0157934 A1, Liang, and further in view of U.S. Pub. No. 2003/0174733 A1, Kawai et al.

Referring to claim 4, the combination of Wang/Liang disclose the method of claim 1, and further disclose the measuring step comprises measuring the delay of the handover procedure (Liang, paragraphs 0006-0007).

The combination of Wang/Liang does not disclose handover delay comprises at least one of a round trip delay of a physical layer protocol signaling, a delay between a radio network controlling device and a base station device, a measurement delay at a terminal device, and a processing delay of said cellular network.

Kawai discloses handover and a transmission of signals in mobile terminals where the delay in handover process is disclosed. Kawai teaches that delay in handover process can be minimized (paragraph 0027, delay in handover processes").

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Wang/Liang by providing the handover delay to comprise at least one of a round trip delay of a physical layer protocol signaling, a delay between a radio network controlling device and a base station device, a measurement

delay at a terminal device, and a processing delay of said cellular network, as the handover delay process of taught by Kawai, motivation being for the purpose of minimizing processing delay and contributing towards a more efficient system.

Referring to claim 15, the combination of Wang/Liang disclose the device according to claim 14, and further disclose the measuring step comprises measuring the delay of the handover procedure (Liang, paragraphs 0006-0007).

The combination of Wang/Liang does not disclose handover delay comprises at least one of a round trip delay of a physical layer protocol signaling, a delay between a radio network controlling device and a base station device, a measurement delay at a terminal device, and a processing delay of said cellular network.

Kawai discloses handover and a transmission of signals in mobile terminals where the delay in handover process is disclosed. Kawai teaches that delay in handover process can be minimized (paragraph 0027, delay in handover processes").

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Wang/Liang by providing the handover delay to comprise at least one of a round trip delay of a physical layer protocol signaling, a delay between a radio network controlling device and a base station device, a measurement delay at a terminal device, and a processing delay of said cellular network, as the handover delay process of taught by Kawai, motivation being for the purpose of minimizing processing delay and contributing towards a more efficient system.

7. Claims 5, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2002/0082012 A1, Wang et al., in view of U.S. Pub. No. 2003/0157934 A1, Liang, and further in view of U.S. Pub. No. 2003/0174733 A1, Kawai et al., and further in view of U.S. Pub. No. 2003/0224826 A1, Sakata et al.

Referring to claim 5, the combination of Wang/Liang/Kawai disclose the method of claim 4.

The combination of Wang/Liang/Kawai does not disclose the measuring step comprises measuring said handover delay comprising said physical layer protocol and wherein said physical layer protocol comprises a radio resource control protocol.

Sakata discloses a system of handover that teaches handover delay comprises physical layer and physical layer comprises radio resource control and how to minimize delay in handover (paragraphs 0006, 0019, and 0022).

It would have been obvious to one of the ordinary skill in the art at time of the invention to modify the system of Wang/Liang/Kawai by providing the measuring step comprises measuring the handover delay comprising the physical layer protocol and wherein the physical layer protocol comprises a radio resource control protocol, as suggested by Sakata, for the purpose of minimizing processing delay and contributing towards a more efficient system.

Referring to claim 16, the combination of Wang/Liang/Kawai disclose device according to claim 15.

The combination of Wang/Liang/Kawai does not disclose physical layer protocol is a radio resource control protocol.

Sakata discloses a system of handover that teaches handover delay comprises physical layer and physical layer comprises radio resource control and how to minimize delay in handover (paragraphs 0006, 0019, and 0022).

It would have been obvious to one of the ordinary skill in the art at time of the invention to modify the system of Wang/Liang/Kawai by providing the measuring step to comprise the physical layer protocol and allowing the physical layer protocol to comprise a radio resource control protocol, as suggested by Sakata, for the purpose of minimizing processing delay and contributing towards a more efficient system.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2002/0082012 A1, Wang et al. in view of U.S. Pub. No. 2003/0157934 A1, Liang, and further in view of U.S Pub. No. 20040219919 A1, Whinnet et al.

Referring to claim 8, the combination of Wang/Liang disclose the method according to claim 7.

The combination of Wang/Liang does not disclose the comparing step comprises the predetermined threshold corresponding to a hysteresis value of at least approximately 200ms.

Whinnet discloses that predetermined threshold corresponding to a hysteresis value of at least approximately 200ms (paragraph 0084, "500 ms")

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Wang/Liang by providing an approximate value range for hysteresis, e.g., 500 ms, as suggested by Whinnet, for the purpose of providing an efficient handover procedure.

9. Claims 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2002/0082012 A1, Wang et al,. in view of U.S. Pub. No. 2003/0157934 A1, Liang, and further in view of U.S Pub. No. 20020018010 A1, Le.

Referring to claim 10, the combination of Wang/Liang disclose the method according claim 1.

The combination of Wang/Liang does not disclose the measuring step comprises measuring an acknowledged mode round trip delay and estimating a peer-to-peer signaling delay based on the measured round trip delay.

Le discloses measuring an acknowledged mode round trip delay estimating a peer to peer signaling delay based on the measured round trip delay (paragraphs 0115 and 0165).

It would have been obvious to one of the ordinary skill in the art at time of the invention to modify the system of Wang/Liang by providing measuring step to comprise measuring an acknowledged mode round trip delay and estimate a peer-to-peer signaling delay based on the measured round trip delay, motivation being for the purpose of providing a more compete measuring step.

Referring to claim 19, the combination of Wang/Liang disclose the device according to claim 14.

The combination of Wang/Liang does not disclose the measuring step comprises measuring an acknowledged mode round trip delay and estimating a peer-to-peer signaling delay based on the measured round trip delay.

Le discloses measuring an acknowledged mode round trip delay estimating a peer to peer signaling delay based on the measured round trip delay (paragraphs 0115 and 0165).

It would have been obvious to one of the ordinary skill in the art at time of the invention to modify the system of Wang/Liang by providing measuring step to comprise measuring an acknowledged mode round trip delay and estimate a peer-to-peer signaling delay based on the measured round trip delay, motivation being for the purpose of providing a more compete measuring step.

10. Claims 12 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2002/0082012 A1, Wang et al. in view of U.S. Pub. No. 2003/0157934 A1, Liang, and further in view of U.S Pub. No. 20040202119 A1, Edge.

Referring to claim 12, the combination of Wang/Liang disclose the method according to claim 1.

The combination of Wang/Liang does not disclose measuring step comprises calculating or deducing said delay from a standard protocol message by using a common time reference.

Edge discloses that a measuring step comprises calculating or deducing said delay from a standard protocol message by using a common time reference (paragraph 0035, "measure timing difference", "synchronizing").

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the method of Wang/Liang by providing measuring step to comprise calculating or deducing the delay from a standard protocol message, e.g., synchronization, by using a common time reference, motivation being to provide a smooth measuring process with a well known process.

Referring to claim 20, the combination of Wang/Liang disclose the device according to claim 14.

The combination of Wang/Liang does not disclose measuring step comprises calculating or deducing said delay from a standard protocol message by using a common time reference.

Edge discloses that a measuring step comprises calculating or deducing said delay from a standard protocol message by using a common time reference (paragraph 0035, "measure timing difference", "synchronizing").

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the method of Wang/Liang by providing measuring step to comprise calculating or deducing said delay from a standard protocol message, e.g., synchronization, by using a common time reference, motivation being to provide a smooth measuring process with a well known process.

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2002/0082012 A1, Wang et al. in view of U.S. Pub. No. 2003/0157934 A1, Liang, further in view of U.S Pub. No. 20020018010 A1, Le, and further in view of U.S. Patent No. 6,735,436, McCauley et al.

Referring to claim 11, the combination of Wang/Liang/Le disclose the method according to claim 10.

The combination of Wang/Liang/Le does not disclose measuring step is based on a counting operation for counting time stamps.

McCauley discloses measuring step is based on a counting operation for counting time stamps (col. 8, line 51 through col. 9, line 12).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Wang/Liang/Le by providing measuring step to be based on a counting operation for counting time stamps, motivation being to provide an efficient measuring system.

12. Claims 13 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2002/0082012 A1, Wang et al. in view of U.S. Pub. No. 2003/0157934 A1, Liang, further in view of U.S Patent No. 6,373,834 B1, Lundh et al., and further in view of U.S. Patent No. 6,031,832, Turina.

Referring to claim 13, the combination of Wang/Liang disclose the method according to claim 1.

The combination of Wang/Liang does not disclose measuring step comprises measuring an uplink delay based on an event report propagation time using time stamps, and measuring a downlink delay based on a physical channel reconfiguration message.

Lundh discloses measuring an uplink delay based on an event report propagation time using time stamps (col. 11, lines 1-19, col. 13, lines 20-35, and col. 15 line 10 through col. 16, line 40).

It would have been obvious to one of the ordinary skill in the art at time of the invention to modify the system of Wang/Liang by providing an uplink delay based on an event report propagation time using time stamps, as suggested by Lundh, motivation being for the purpose of controlling the uplink transmission efficiently.

The combination of Wang/Liang/Lundh does not disclose measuring a downlink delay based on a physical channel reconfiguration message.

Turina discloses measuring a downlink delay based on a physical channel reconfiguration message (Abstract, col. 4, lines 5-17, col. 8, lines 5-20).

It would have been obvious to one of the ordinary skill in the art at time of the invention to modify the system of Wang/Liang/Lundh by providing measuring a downlink delay based on a physical channel reconfiguration message, motivation being for the purpose of controlling the downlink transmission efficiently.

Referring to claim 22, the combination of Wang/Liang disclose the device according to claim 14.

The combination of Wang/Liang does not disclose measuring step comprises measuring an uplink delay based on an event report propagation time using time stamps, and measuring a downlink delay based on a physical channel reconfiguration message.

Lundh discloses measuring an uplink delay based on an event report propagation time using time stamps (col. 11, lines 1-19, col. 13, lines 20-35, and col. 15 line 10 through col. 16, line 40).

It would have been obvious to one of the ordinary skill in the art at time of the invention to modify the system of Wang/Liang by providing an uplink delay based on an event report propagation time using time stamps, as suggested by Lundh, motivation being for the purpose of controlling the uplink transmission efficiently.

The combination of Wang/Liang/Lundh does not disclose measuring a downlink delay based on a physical channel reconfiguration message.

Turina discloses measuring a downlink delay based on a physical channel reconfiguration message (Abstract, col. 4, lines 5-17, col. 8, lines 5-20).

It would have been obvious to one of the ordinary skill in the art at time of the invention to modify the system of Wang/Liang/Lundh by providing measuring a downlink delay based on a physical channel reconfiguration message, motivation being for the purpose of controlling the downlink transmission efficiently.

13. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2002/0082012 A1, Wang et al. in view of U.S. Pub. No. 2003/0157934 A1, Liang, and further in view of U.S Pub. No. 20040202119 A1, Edge, and further in view of U.S Pub. No. 20040219919 A1, Whinnet et al.

Referring to claim 21, the combination of Wang/Liang/Edge disclose the device according to claim 20.

The combination of Wang/Liang/Edge does not disclose measuring means is arranged to use a common time reference for calculating or deducing said handover delay.

Whinnet discloses measuring means is arranged to use a common time reference for calculating or deducing the handover delay (paragraph 0084, "500 ms").

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Wang/Liang/Liang by providing an approximate value range for e.g., 500ms for hysteresis, as suggested by Whinnet, for calculating or deducing the handover delay for the purpose of the purpose of providing an efficient handover procedure.

14. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2002/0082012 A1, Wang et al. in view of U.S. Pub. No. 2003/0157934 A1, Liang, further in view of U.S Pub. No. 20020018010 A1, Le, and further in view of U.S Pub. No. 20020107031 A1, Syrjarinne et al.

Referring to claim 23, the combination of Wang/Liang/Le disclose the device according to claim 19.

The combination of Wang/Liang/Le does not disclose measuring means comprises a frame counter for keeping a time stamp.

Syrjarinne discloses a frame counter for keeping a time stamp in a time synchronization for cellular phones (paragraphs 0020, 0023).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Wang/Liang/Le by providing measuring means to comprise a frame counter for keeping a time stamp, as suggested by Syrjarinne, motivation being to provide more efficient measuring system.

15. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2002/0082012 A1, Wang et al. in view of U.S. Pub. No. 2003/0157934 A1, Liang, further in view of U.S Pub. No. 2004/0053606 A1, Artamo et al.

Referring to claim 24, the combination of Wang/Liang disclose the device according to claim 14.

The combination of Wang/Liang does not disclose the network device is a device responsible for handover in said cellular network.

Artamo discloses a network device such as radio network controller responsible for handover responsible for handover in the cellular network.

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Wang/Liang by providing a radio network controller responsible for handover responsible for handover in the cellular network, as suggested by Artamo, for the purpose of providing an efficient handover method.

Referring to claim 25, the combination of Wang/Liang disclose the device according to claim 14.

The combination of Wang/Liang does not disclose the network device is a radio network controller.

Artamo discloses a network device such as radio network controller responsible for handover responsible for handover in the cellular network.

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Wang/Liang by providing a radio network controller responsible for handover responsible for handover in the cellular network, as suggested by Artamo, for the purpose of providing an efficient handover method.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Keurulainen et al U.S. Patent No. 6,198,928 B1 discloses a method for handover in a cellular network.

Hussain et al. U.S. Patent No. 6,366,781 B1 discloses a method and system for time of arrival based positioning during handover.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred A. Casca whose telephone number is (571) 272-7918. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid, can be reached at (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RAFAEL PEREZ-GUTIERREZ
PATENT EXAMINER
7/20/05